PILOT APPLICATIONS PROJECT

Capacity Building Workshop on the Climate for the Media in Uganda.

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ACRONYMS

GHA Greater Horn of Africa

GHACOF Greater Horn of Africa Climate Outlook Forum

DMCN Drought Monitoring Center Nairobi

GOU Government of Uganda

WMO World Meteorological Organization

DoM Department of Meteorology

NMHs National Meteorological and Hydrological Centers

SOI Southern Oscillation Index

CMAU Climate Media Association of Uganda

PAP Pilot Applications Project

NECJOGHA Network of Climate Journalists in the Greater Horn of Africa

NMS National Meteorological Services

PILOT APPLICATIONS PROJECT MEDIA TRAINING WORKSHOP ON CLIMATE

Executive Summary

A capacity building workshop was found necessary to achieve a closer working relationship between the media and climate scientists in Uganda. Twenty practicing journalists drawn from the print, electronic, audio and visual media participated in the workshop together with scientists from the Department of Meteorology and trainers from Makerere University and media trainers. The over-riding objective of the workshop was to build the capacity of journalists in Uganda enable a better reporting of climate related issues in various sectors of the media.

The workshop addressed the bottlenecks that currently exist in the dissemination of climate information. Participants were exposed to general concepts of the weather and climate. They were also introduced to basic terminology that is in common use in climate science.

Experts in meteorology and principal users of climate information addressed the workshop in collaboration with media trainers who guided the interactive training that included a half day visit to the National Meteorological Center where participants had a first hand exposure as to how climate data is collected and assembled. They also were able to see first hand the equipment used in the generation of data.

The outcome of the workshop is evidently a better-informed media with improved reporting skills to make them handle weather and climate information with a better professional touch. This workshop is the foundation for the media to disseminate climate forecasts and other meteorological information to be put to profitable use by different sectors of the Ugandan society.

Introduction.

Uganda is a landlocked country with an agricultural driven economy. More than 80% of the population lives in the rural areas with agriculture as the principal employment. There are almost three million farm families with the majority of them are peasant farmers. They are dependent on rain fed agriculture to produce food and cash crops for local consumption and the export market. The receipt of timely climate information therefore goes a long way in enabling farmers to plant on time and therefore realize an increase in yields.

The receipt of timely weather and climate information can be a critical factor in influencing decisions made by farmers. Timely knowledge of the likely performance of the climate during the main crop seasons is an added plus to the planning process in a farming enterprise.

The Department of Meteorology continues to issue weather and climate forecasts. These are short term, medium term and long term. These forecasts are often received by the user community too late to be fully exploited. If the users received them earlier, it would go a long way in turning knowledge into commercial gain.

The Problem.

The timely dissemination of climate information is hindered by the lack of proper understanding of climate information and how to relate this information to the needs of the users. The media is an important link between the climate scientists and the users.

However there is an acute lack of understanding of the weather /climate by the media. This has often led to a failure by journalists to impress upon the users the value of the information being conveyed. Because of the difficulty in translating the information in user-friendly packages, there has been a tendency for few journalists to pick interest in the weather and climate. This is not to mention the fact that in most instances the information is released in English and needs to be translated into the local languages for broadcast over radio, print and television.

Meteorologists have also not been helpful in downscaling the complex scientific jargon that they generate. The result has been a communication bottleneck between the climate science community and the media. Consequently this has created a need to have the two profession better understand one another for the common good.

Intervention.

The intention of the media-training workshop was to address the observed problems by bringing together climate scientists; the media and major users of weather and climate forecast information. The media was exposed to the principal formulators of climate information and how the forecasts relate to various sectors of development.

The forecasts and how they can influence crop and animal husbandry, energy generation, water resources and forestry management, the economy, health, disaster preparedness and relief operations was discussed at length. The participants with the guidance of the media experts trained extensively drawing from several live examples how forecasts relate to several sectors. The climate variability, hydrology and probabilities in climate forecasting were also addressed.

Methodology.

Pre-Training Needs Study.

In order to determine the training needs of the media, a study was conducted within the media houses involving practicing journalists, sub editors and editors to determine the level of perception and awareness of the media about climate issues. The aim of the study helped identify key areas that require to be addressed with emphasis in the media workshop. It also assisted in identifying participants.

The analysis of the data generated by the study will give a scientific basis on which training needs can be appended for further training program that may not be adequately tackled by this workshop.

Broad Aims of Project.

The aims of the project was achieved by holding a 3 day workshop for 20 practicing journalists drawn from radio, television and the print media. The training was in the form of lectures, discussions and exercises. Practical writing and broadcasting skills were tackled in detail. The training involved a field visits to climate forecasters at the National Meteorological Center in Entebbe.

The interaction of the scientific and media trainers as well as the trained journalists will form a nucleus on which to start a mass dissemination campaign. This will be a springboard on which other professionals in Uganda and the region can be brought aboard the climate community ship.

The confidence by the public in climate forecasts released by most National Meteorological Services in the region is lacking. By enabling the media to attain better reporting skills on the climate will go a long way in raising the confidence levels of the public in climate information. The outcomes of the workshop will make journalists make regular updates on any changes in climate forecasts instead of engaging in endless conflicting arguments.

Beneficiaries.

- A trained and more informed media.
- Better dissemination of weather and climate forecast information to end users
- Effective and timely dissemination of products from Meteorological Services.

Cost Effectiveness of Project.

The economic benefits in the long run will go to hundreds of rural farmers with access to radio messages. Other users will be able to access information from the radio and alternate channels of information dissemination.

The involvement of an informed media will change the manner in which mitigation of adverse climate conditions are handled by the relevant line ministries and agencies.

Several parts of the country are affected by pockets of food insecurity caused by shortfalls in rain and other climate variability. An informed media would help in reducing these shortfalls by giving early warnings through the press.

The success of this project will form a basis after evaluation for the same approach to be replicate in other countries of the Greater Horn of Africa countries. The application is relevant for other specialized agencies in need of improving on dissemination of their products to the end users.

Conclusion.

The workshop is fertile ground for cementing a lasting relationship with the meteorological services and various users of the forecast information.

Workshop Proceedings.

Chapter 1: Introduction to Climate Reporting

<u>Introductory Remarks by Patrick Luganda</u>

First I wish to welcome all of you to this workshop, which is primarily targeted at bringing closer ties between the media and the climate community. We have in attendance practicing journalists from the print and electronic media. We also have senior members of the climate community in Uganda who will help us in the next two or so days to grasp an understanding of pertinent weather and climate issues.

I take the pleasure to welcome all of you to this important workshop. We believe that the knowledge that you will get here shall serve as the foundation for future training of the media so as to come to better understanding and appreciate the value of climate information.

I take this opportunity to thank the Drought Monitoring Center, Nairobi who have enabled the sponsorship of this workshop under the Pilot Applications Project program.

Background information on this PAP project

Most people do not understand climate and many of them do not want to hear about the climate. Even the journalists, who are extremely influential in shaping public opinion, say that they are not interested in reporting about climate issues. The purpose of this interaction therefore is to introduce you to climate and interest you in making it worthwhile for you to report about it.

Climate information has been generated and continues to be generated by climate experts but rarely are they used in our press reports. This is unfortunate. We want you journalist to take on the challenge to appreciate the topic. The products generated by the climate community in Uganda and indeed the science community in the Greater Horn of Africa (GHA) countries can be disseminated by the media for the improving lives of the people in the region.

Together with practicing journalists in the GHA, a Network of Climate Journalists in the Greater Horn of Africa (NECJOGHA) was recently formed. We decided that journalists should form a body in each country to bring them together and forge closer working organized reporters. Uganda will in the near future host a regional media workshop to map the way ahead.

Before this workshop, a pre-training study was conducted to know about informed the media was in the country. More than one hundred questionnaires were administered and they have guided us in preparing training materials for the workshop.

The expected outcome of this training is:

- More informed media on climate
- More informed scientists on media
- More interactive relationship between the media and the climate scientists
- Deeper understanding of limitations in dissemination by both sides
- Develop strategies to strengthen communication channels

Opening Remarks: Commissioner of Meteorology: Mr. Bwango Apuuli

I welcome the coming together of the media and meteorologists and working closely. The Pilot Application Projects by the Drought Monitoring Center, Nairobi has given a lot of opportunities to many countries in the GHA to participate in the PAP but only Kenya has taken up the challenge and applied for the funds. I urge Ugandans to come up with proposals to access these funds. The money is available at the DMC, so make good use of it.

As we are here we should realize that no one has all the information about climate. We should use this opportunity to get information from meteorology. This information that is important to the public comes in the form of forecasts. There are two main types of forecasts. There is the short-term forecast that normally comes out daily over the radio, television and other media. The other is the seasonal forecast, which is a longer time

projection longer-term projection of the climate. Please make use of this opportunity to make contacts with the people who can give you the information easily. They are here.

Effective Science Reporting: Dr. Charles Wendo, Science Editor New Vision

Nobody has a monopoly over information. Scholars will tell you that science is not an isolated subject but rather an aggregate about the simple things that enable.

Who Reports Science in the Media.

There are specialized science reporters but even any other reporter can take up science reporting as long as they have the interest. You must have an insight about what you are reporting about. Get the facts right, you do not need someone from mars to write about science. The late Sir Ndyakira Amooti, Patrick Luganda and many others are Ugandan journalists who have had the ability to write or report effectively. You can also make it.

What do we want to achieve.

Science is with us daily so we have to give the public accurate information. This will enable to influence policy but also make money for the science journalists. You need to come up with science stories, which can give you some money. If we do not have the media houses to pay for the science stories then we devise other avenues like Internet and media organizations abroad.

Coming up with good science stories.

Most science reporters are self-made. The more often you report on science the more it becomes easier for you to come up with a credible story. Some tips on making it to the top include:

- Read widely
- Be curious
- Attend workshops
- Specialized science training.

It is only you who can make yourself a good science reporter. If you really want to write you must be well informed. In Uganda we have reported about weather forecasts for a very long time. A new event will make news like El Nino, fire, name it, something that is surprising or unusual and one, which has an impact on the people.

Take Kabale for instance; of late we have warmer weather conditions there. So if by any chance it became colder again, then that will be news. Clashing news in science, prominence if prominent person, make prominent news and it can make an impact. Topical events like the El Nino, any change of the rainfall patterns, all these make good science news.

A scientist sees and then defines the science news. What the journalist sees as news is not necessarily what the scientist saw. This could be due to the style of writing but also of the level of understanding of the information as well as the time frame in which the dissemination is done.

If a journalist makes a slight mistake in the story then he should not necessarily be blamed. Very often scientists are press shy, so to avoid making mistakes reporters should make independent research before you go to get material from the scientists. Do your homework well. Remember if you are working under deadline pressure it may be very difficult to go back to the scientists to check and clarify on issues.

Tips on developing a climate story.

- Do not look at climate in isolation.
- Broaden your views.
- Look at football match that is marred by bad weather not just as a football match.
- Look at wetlands, droughts, El Nino, and have broader mind than having a report about weather forecasts.
- Use credible sources.
- Accuracy and well balanced stories.
- A slight error may cause big damage, so avoid errors.

- Evidence gathered to be used well.
- Scientific jargon- define it
- Avoid excessive use of numbers and statistics.
- Double check spellings, and numbers.
- Use interesting quotes.
- Highlight the economic implications it helps to make more news.
- Attribute controversial statements to their sources.

Understanding the Global Climate Systems: S.A.K. MAGEZI, Assistant Commissioner. Scientists are humble people. They know very much, but the more they know, the more humble they become. The whole issue driving climate science is statistics. There are definitions that we need to know from the beginning. Weather and climate are two essential definitions that we need to get clear from the start. The weather is the observations in the changes in the atmospheric conditions from time to time. This is observed at a micro scale, which you may call the local conditions. These are observations over a radius of a few kilometers.

Regional scale is at a radius of 100-500 kilometers and synoptic scales range 1000-4000 kilometers. Meso scales are at the continental scale while planetary observations are for the whole globe.

In examining the climate systems it is essential to realize what really drives the climate systems. The principal mover of the climate system all over the world is the radiant energy from the sun. It is responsible for all atmospheric motion.

Then there is water vapour. Although it comprises 3% by weight of the total atmosphere, it is in a constant state of transformation. It is changing at any one time from liquid water, solid form (ice), to vapour. This leads to heavy exchange of energy. Although it comprises 3% by weight of the total atmosphere, at the surface it is a constant state of transformation 1% ice/water/vapour (hydrological cycle). This leads to tremendous energy exchanges that are released into the atmosphere.

Total average moisture in the atmosphere is only sufficient for ten days of rainfall, but it cannot rain all over the surface of the earth at the same time for these number of days. The sources of moisture are Oceans, Lakes, Rivers damp soil and Plants (forests). Apart from the Lake basin area, less than 10% of the rainfall in Uganda is of local origin.

Important Wind Systems for the region.

Tropical Easterlies. These are constant usually north and South easterly winds which converge into the Inter Tropical Convergence Zone (ITCZ).

Equatorial Westerlies; these are cross equatorial winds mostly over Africa and Southern Asia. They are commonly referred to as the Monsoons and do carry a lot of moisture.

Other Systems.

Frontal Systems. These are mostly in the Temperate Latitudes characterized by the meeting of two or three different air masses. In special cases these systems occasionally affect Uganda. This is common during the months of December and January.

Tropical Weather and Climate Systems.

Squall lines and Easterly waves. These are straight-line regions (hundreds of km's long) of severe weather moving westwards. Most affected areas are over West Africa.

Cyclones/Hurricanes. Regions of intense weather over tropical oceans with wind speeds in excess of 70 knots. They do not have a significant effect on Uganda's weather. They are difficult to predict and usually distort the seasonal forecasts.

Inter Tropical Convergence Zone (ITCZ) – A low-pressure zone at the convergence of the South and North Easterlies. It follows the movement of the sun. It is not always an E-W direction over Uganda. It usually lies in N-S direction.

Arabian Ridge- This is a high-pressure mass over the Arabian Peninsula.

Congo Air Mass: Warm moist tropical air mass over the Congo basin.

The El Nino and the La Nina events are climate events that come about as a result of the cooling and warming of the Tropical Pacific ocean causing the occurrence of droughts and flooding in many regions of the globe within the tropical zone.

Climate change and climate variability.

Due to the global warming the temperatures have been observed to be on the increase. The frequency of extreme weather events in Uganda has increased and this frequency is expected to increase further.

What is Climate Information? : Michael Nkalubo-Principal Meteorologist.

Climate

This is the average weather condition of a place. Climatology of a place is normally determined by the average weather conditions over 30 years. The weather elements are normally observed and stored include minimum and maximum air temperature, rainfall, humidity, wind speed and directions, dew point, air pressure, soil temperature, evaporation, solar radiation, cloud cover and height etc.

The traditional climate service has been to provide climatological data and derivations.

These are normally available from the National Meteorological and Hydrological Centers (NMHs) data banks or in regional/global data centers.

Climate applications are manifold and relate to a wide variety of socio-economic activities. Through the successful implementation of the CLICOM project, most NMHs can today present quality controlled climatological information in computer compatible form. Besides raw data, the data banks and climatological bulletins include derived statistics, time series and spatial analysis and various types of specific regression or associations with related fields.

Information.

Has several definitions but the Webster's dictionary one will suffice: 'Knowledge acquired in any manner, facts, data, learning.'

Climate Value.

Traditionally sectors such as food production and forestry have used climate information as an essential component both in planning and operations. The climate has determined what kind of crops would be viable, when to plant or sow and how to manage agriculture land.

Entire national economies have been based on climate conditions. Today, we know that many other socio-economic sectors are sensitive to climate. The need for energy, as well as the feasibility of using various forms of alternative energy production is directly dependent on climatic conditions. Water is vital to many socio-economic activities, but its availability is increasingly critical and water resources management is increasingly dependent on accurate climate information and predictions.

Related to the availability of water and provision of food security, are the potential risks of drought and devastating desertification. Climate information and prediction services can help authorities plan for and mitigate the impact of these natural disasters. Climatological information is also an important component in disaster prevention.

In determining risks of floods, shoreline destruction, landslide and avalanches, a thorough knowledge of climate and its variability is important. Climatological information is an important input in land use planning both public and private.

Urban development depends on expected future climate conditions and individuals may choose to settle in areas where the risk of climate related disasters are minimal. Tourism already one of the world's major industrial sectors, use climate as a basic resource.

Climate applications and services can facilitate both planning and operations in a more economic and environmentally sustainable fashion. These services can normally be the provided by the NMHs, which possess a wealth of information obtained through careful monitoring. As well as climatological information, they have the expertise to analyze and interpret it in response to the specific requirement for various socio-economic activities.

Many national and international institutions (including our Uganda Meteorological Department) already provide outlooks and prediction on seasonal and inter annual time scale. This information may become more widely available through such communication as Internet and the World Wide Web but in order to be of real value in decision-making, it has to be appropriately interpreted and applied. This is where journalists may play a vital role. We need you to be equipped to translate this information into useful climate applications and services for a variety of socio-economic sectors. The UMD normally provides interpretation of local conditions i.e. relevant to specific activity or even to a specific location within the country.

Climate Information/Services for Sustainable Development

The concept of sustainable development has grown out of the concern for global and large-scale regional impacts on the environment from various human activities. The world commission on environment called the Bruntland Commission gave a definition of sustainable development as:

"Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable development is still widely perceived as an essentially environmental issue, however and as such relates in many aspects to the issue of climate, its variability and change.

Climate is itself a resource upon which many socio-economic issues are based. Indirectly climate influences not only the resources but also the opportunities for development of economies and it is thus obvious a thorough knowledge of the climate and its evolution

should serve as a basis for decision making. Many socio-economic activities, such as food production, water use, energy production and use, transportation of different kinds as well as tourism and recreation, all relate to climate as a precursor at the same time as they impact on climatic conditions at least locally and in many cases both regionally and globally.

In several cases, the indicators designed to monitor progress towards sustainable development need to embrace climate considerations. Obvious cases relate to environmental pollution and the detection of climate change, but agricultural development or water resources management also needs to take climatologically aspects into account. Many forms of sustainable and renewable energy forms including hydropower, biomass, solar and wind energy are climate dependent and climate information and services are therefore necessary in their development and operation. Sustainable development in various socio-economic sectors relate directly or indirectly to such issues as global change and long-range air pollution transport with subsequent acidification of soil and waters.

Climate information and services provided at a local or national level can have a positive impact at a regional and even global level. The role of NMHs in providing such climate information/services support is thus important.

Climate Information/Service to the Public.

Community needs for climate services are reflected in the types of request for climate information and the range of services that have been developed by NMHs to meet those needs. These needs include not only inquiries from the general public but also requests from almost every sector of the economy, agriculture, transport, water, energy, health, education, tourism, construction and manufacturing to name but a few.

The general community interest in climate information has been raised by the high profile of debate on issues such as the enhanced greenhouse effect, depletion of ozone in the atmosphere and the El Nino effect.

Some more complicated needs require analysis of the climate data. What is the frequency of strong winds at this location or low temperature at another? What are the frequencies of drought at a number of different locations, where farming is marginal?

Such needs can often be met by the range of routine analyses carried out by the Department as part of maintaining the climate record for e.g. monthly means and extremes of the main weather elements.

A country like Uganda affected by drought and influenced by El Nino, the provision of information on extreme and persistence of rainfall deficiencies, the Southern Oscillation Index (SOI) and climate outlooks on SOI, Sea Surface Temperatures (SSTs) and analogues are all meeting the needs of the farming community and planners. Information packages through monthly and ten day bulletins are provided at the districts to help extension workers and farmers.

Climate information can be a valuable part of weather presentations in the media especially newspapers. Climate information to the public through FM stations and television has been appreciated.

Climate Information and Food Production.

Agro-meteorology is a science, which serves agriculture, forestry and fisheries, which are most sensitive and indeed vulnerable to climate variability. Information can be given for long term, medium term and short-term planning and operational decision.

Long term is mainly for planning land use and determining strategies to increase food production under a range of climatic conditions. Medium term options or agric-climatic forecasts are concerned with the assessment of current crop and soil moisture conditions based on observations. These include:

- Forecasting the optimum times for carrying out field work operations, applying fertilizers, sowing and harvesting, crop development phases
- Forecasting the quality and quantity of yield of main crops

Sort term operational decisions relate to a period from a few hours to a few days and are based on crop and soil conditions and weather forecasts. Examples:

- Scheduling irrigation based on water balance sheets involving daily rainfall and estimates of potential evaporation to decide on when and how much to apply to crops.
- Controlling plant diseases and pests
- Protecting crops against wind damage by windbreaks and shelter belts against heat and soil moisture losses by mulching

Climate Information and Water Resources Management.

The basic climate information needed for water management projects relates to precipitation and evaporation. Climate information is indispensable in general water management studies, for instance at the stage of calculating regional water balances. Climate information plays a significant role in both reservoir design and operation. Knowledge in advance that a dry and hot period is coming, the reservoir operator may discharge only a small volume of water, just enough to meet minimum requirements needed to maintain biological life down stream. Alternatively if abundant precipitation is expected, the operator may discharge a large volume of water, creating additional space to accommodate a flood wave.

Climate Information and Energy

Climate information is required for assessing wind energy potential. Wind power can be used for pumping water for human consumption or for irrigation. The basic resource for solar energy development and use is the availability of solar radiation. Solar radiation is a parameter measured by the department of meteorology. Solar energy like wind energy is clean and renewable and where available it is recommended because the production does not cause emission of green house gases.

Climate information is also important for urban development, the health sector and the aviation industry.

Conclusion

The value of climate information cannot be over emphasized. Different sectors in the socio economic development require different pieces of climate information to be able to make meaningful, cost effective and guided decisions. Some countries especially the advanced ones have quantified climate information value in monetary terms and figures are quite impressive enormously.

Developing a Climate Forecast: Abushen Majugu-Assistant Commissioner.

Participants were told that the department of meteorology has four divisions. These divisions work hand in hand to record field observations, compile data and analyze it.

The division's liaison to ensure applications of information and products to the end users.

Majugu explained that because of not knowing which section to contact, journalists ended up being tossed up and down. He explained the short-term weather observations and the linking of the local observations with international climate centers. He said they worked closely to ensure that they came up with a seasonal forecast, a monthly forecast and a ten-day forecast. The agro-meteorology section uses the information to develop advisories for the farmers.

Climate Information Decision Making by Paul Isabirye-Principal Meteorologist
In our day-to-day lives we have to make and take decisions. There are certain indicators of chance although at times these may not come true. Man has a bulk of indicators of chance, which influence several decisions daily. Some indicators may be superstitious and have an impact or meaning on society.

The participants were invited to play a game to help them understand these probabilities. The game involved determining the probability of:

- Probability of giving birth to a baby girl
- The probability of the child being a boy
- Chances of rain on a particular day.
- Predictions of the weather/seasonal forecasts.

All information given is very important but it can never be 100% correct. Most of our activities are nature dependant so we should take them seriously. Whenever we make decision we should always have contingency planning.

How should we make contingency planning

- It's important that you know some important factors and goals for your activities.
- Our activities are not independent; weather is a pertinent issue while making some
 of our decisions.
- Potential impacts of the given or expected climate on your activities.
- Look for where you expect the minimum impact.
- Given a seasonal forecast and the potential impacts under the different options take a decision. It may be necessary to update your decision as the season progresses.

Chapter 2: Climate Communications

The Role of the Media in Disseminating Climate Information: Patrick Luganda

By the nature of our work we are supposed to know quite a lot. We have to appreciate that we have a cardinal role to play despite the fact we are likely at times be mistrusted by a number of scientists.

It is the facts that we present that will spare us crucifixion by our colleagues in the science community and the public. It is imperative that reporting is accurate. We should always work with urgency. The objectivity in our reporting must be crucial. Do not be complicated in your reporting for you impress nobody. The simpler and clearer your journalism, the more people will benefit from your work.

You are the main link between the Science community and the public. Whatever you learn in this workshop do not go back and throw in the dustbin. What you are getting here is a strong foundation for you to build in your career in science reporting.

If others can build a foundation in other subjects successfully, then we as climate reporters can also become successful in our reporting. You should create confidence in your self with intent of creating confidence in the public about what you are reporting about.

As we proceed on the very involving task of climate reporting it will be necessary to pass on information that has had value added to it. In order to so this you as an individual have the challenge of working hard at the subject. In addition you must seek out training opportunities. You need to upgrade your knowledge by accessing libraries, Internet and so forth. When we part as individuals we should set out to create an impact in what we report.

Do not make fun out of the weather forecasts. Just come up with serious reporting to enable your listener get/benefit out of the information you have given. You must realize that your reporting has very immense impact on the audience. It can destroy or make their lives. Think of what you are likely to use like drama, music, diagrams, etc. In all your work you must try to be creative and come up with ideas that will make climate reporting interesting and useful to society.

Communicating Forecast- Effective Media Release: Milton Waisswa- Ranet Uganda
The purpose of a media release is to ensure that information reaches the ground. In
making the release there are problems that may be encountered. If you examine how the
media communicates climate information to the audience you find that there are
shortcomings.

In the last El Nino event for instance, the reports coming out in the media were often misleading and failed to convey what the scientists intended to convey to the public. When we interact with the public we find that some information published or broadcast over radio is a misrepresentation of the weather forecasts released by meteorology. Uganda has different climate zones and two rainfall patterns.

Until the media comes in understanding of the climatic zones we are likely to get misreporting and misrepresentation of the facts. The country is divided up in climatic zones and it is not possible to give a blanket forecast for the whole country. Rather it must be on zone-by-zone basis. At the moment the media usually advises all Ugandans to start planting regardless of which area they are in yet it may not be raining at that particular time.

This is why it is important that when one is making a media release for the media, its effectiveness will be felt only if the climate zones are clearly spelt out. In so doing the journalists are guided on what the picture for each part of the country is likely to be like. After the forecasters have finished making their report, it is important for the meteorology department to come with a clear media release that takes in all the details but remains simple enough for it to be helpful to the media and eventually the public.

Field Training Session- A Tour of the National Meteorology

'The afternoon was spent at the National Meteorological Center at Entebbe with forecasters and other scientists in the field. The media fraternity had the opportunity to see at first hand how the meteorological products are generated. They were shown instruments and equipment that is used and how time sensitive the products were. It was also a timely visit as the journalists were able to learn about the necessity to increase funding to the department. They promised to highlight the need for better equipment and replacement of existing obsolete instruments such as radar and other observation tools. It was agreed that reporting about the condition of the workers would also help bring policy makers to give attention to the climate sector.'

Chapter 3: Forging Partnership for the Future

Communication Climate Information to Diverse Audiences by Patrick Luganda Climate forecast information becomes of differing value to diverse audiences. It is important to translate any climate information to the audiences so that they can understand it well and take benefit of it.

However much you work on an issue, however long you work on an issue you are not an expert . It is the experts in climate who will give you the information and you must always seek for it from them.

After getting the information you have to find ways of adding value to it by seeing how it will affect the other sectors of the economy and society. You are looking for things like flooding, hunger, health, infrastructure and others issues that affect the everyday person in the villages and on the streets

You can generate climate stories from all these different topics. The expansion of story ideas is dependent on your ability to think of widely as to how the topics impact on your audience.

Whereas some stories may deal with the immediate impacts, others will deal with the future. It could be affecting nutrition in the future or the economy months down the road. In all that you do remember that you are a conduit for information to be passed on to the public. You are not an expert. Therefore always remember to seek audience with an expert in the sector that is being affected, Never assume that it will once you get a reply to a question in one instance, it will always be the same answer if the same climate/weather condition appears.

For instance El Nino events are never replicated. Each one is different from the last other. That is why it is essential to speak to the experts who will interpret it for you. Each sector needs an expert input. Sometimes it may be a sub sector within a sector and it will need you to seek his version. That way you will have good well-researched stories for your diverse audiences.

The Climate- Hydrology Highlights: Professor Basalirwa

Climate and weather seem to be related but somehow different. While weather is the observed behavioural pattern in the atmosphere over a short period of time, climate is the mean behaviour of the observed weather pattern over a long period of time.

Extreme weather events are different. This describes the extreme deviation of the normally observed climate of a given place. These extreme weather events are important to the welfare of the people. These can be like the El Nino and La Nina, which occurred a couple of years ago.

When these extremes occur, the rural people get concerned about food security while the urban get worried about the need to carry umbrellas and the like.

Extreme Weather Events and the Media

Some people in the media have been heard saying that Meteorology Department should be closed because they are giving out wrong information. This is because the media had not attached great importance to climate. I am glad that you are here today and coming closer to the scientists to learn more about us.

How climate relates to the Hydrological Systems

Water has 3 phases. There is ice, which is the solid form. Then water, as we know it in its liquid form and water in the vapour phase.

How do we get water?

We get water from fresh water sources. The hydrological cycle is a cycle with matter that can never be created nor destroyed. No single molecule of water gets lost at any stage. It just keeps rotating in the three phases we have seen above.

How much water do we have in the world?

We have a massive amount of water but only a small fraction is in the form of fresh water. Most of it is in salt-water form. Only 0.02% of the water is in lakes, rivers etc in fact soils have more water than the surface. From this inventory it is clear that the sea is a big contributor to the weather patterns. The air mass movement determines weather. It is your role as journalists to understand all this so that you can report objectively.

There is only one source of energy, which drives the hydrological cycle. This is the sun. Climate variation has been going on all the time. It is about understanding what causes the variations that is crucial. Very many people mistake land use and mistake it to mean climate. We do not measure climate by the size of matooke, but rather by the measure of amount of precipitation that is received in that particular place.

In our Educational sector what some radio stations are doing is called plagiarism. They are broadcasting climate information that the meteorology has passed on to the WMO or other climate centers without crediting the source. The Meteorologists are taking it lightly but it is important to have these people take on the right information. It is difficult for the Meteorology people to give wrong information. You need to trust them in their work.

Linkages between Climate Scientists and the Media-Brain Storming Session

Outcome of Brainstorming Session

- Need to factor disaster preparedness with climate information so that reporting can be more effective
- Meteorology department should consider giving the weather forecasts free to media houses instead of selling the information.
- Training should be constant for the media and the scientists
- Selling met. Information came up as a policy to raise money as department prepares to become agency. A form of cost recovery
- Public needs more that just what will happen but also likely impacts
- Start up magazine on climate to help media better understand
- Negative impacts can minimized by climate information delivered at right time
- Need for networking within the media and climate community
- Meteorology needs to be considered a priority sector due to diverse impacts on other sectors like health, agriculture and others
- Identify the users and start addressing their needs and how can use climate information for benefit
- Media houses should always seek for information from the National Meteorological Services and not CNN or other channels

- Media invited to become members of the Uganda Meteorological Association
- Scientists and the media should always compare notes
- Media should be full involved in planning and disseminating mitigation measures in the face of disasters

Chapter 4: Formation of Climate Journalists Association.

- Executive Members
- Maiden Speech by Chairman
- Closing Remarks.

Elections were held for an interim Committee of the Climate Media Association of Uganda (CMAU). A brief was given about the importance of the formation of the association for Uganda to link up with the Network of Climate Journalists in the Greater Horn of Africa (NECJOGHA). Emphasis was placed on the necessity to start work on a draft constitution and draw up a timetable of activities to be executed for the rest of years. There was need to draft a constitution which will stipulate the different duties of the executive members:

Executive Committee Climate Media Association of Uganda:

- 1. Wamboga Mugirya –chairman
- 2. Semakula Vera- General Secretary
- 3. Wambi Michael-Organizing Secretary
- 4. David Kaiza-Treasurer
- 5. Gerald Tenywa-Committee Member
- 6. Onyango Charles-Committee Member
- 7. Idris Kisambira-Committee Member

Maiden Speech.

Mr. Wamboga Mugirya thanked the participants for the trust they have placed in him and he promised to lead the infant association to greater heights. He pledged to forge a close relationship with the scientists as well as interest more journalists to report on climate issues with focus and responsibility. He promised to work on getting the association registered with the authorities so that its activities become officially recognized. He also looked forward to networking with other associations in the Greater Horn of Africa countries.

The workshop was officially closed by Mr. S.A.K. Magezi, Assistant Commissioner, Forecasting, on behalf of the Commissioner of Meteorology and Permanent Representative to the World Meteorological Organization, Uganda Mr. Bwango Apuuli.

Participants.

- 1. Joyce Tabingwa-Presenter, Radio Uganda
- 2. Vera Semakula-Producer, Radio Uganda
- 3. Gerald Tenywa-Environmental Reporter, The New Vision
- 4. Idris Kisambira-Reporter, The New Vision
- 5. Wamboga Mugirya-Reporter, The Monitor Newspaper
- 6. Anthony Mugabe- Reporter, Radio West
- 7. Paul Isabirye-Principal Meteorologist, Department of Meteorology
- 8. S.A.K. Magezi-Assistant Commissioner, Dept. Meteorology
- 9. Abushen Majugu-Assistant Commissioner, Dept. Meteorology
- 10. Professor Basalirwa- Professor Makerere University
- 11. Michael Wambi-Reporter, Voice of Teso
- 12. Grace Musimami-Climate Communications Project
- 13. Milton Waisswa-Meteorologist Ranet Program
- 14. David Kaiza-Reporter, The East African Newspaper
- 15. Charles Onyango-Reporter, Radio One FM
- 16. Dr. Charles Wendo-Science Editor, The New Vision
- 17. Michael Nkalubo-Principal Meteorologist, Dept. Meteorology
- 18. Patrick Luganda-Senior Features Writer, The New Vision
- 19. Robert Ikuar-Reporter, The Monitor FM Radio
- 20. Josephat Seguya-Features Writer, Bukedde Newspaper
- 21. Ben Bella Ilakut- Head Mass Communications, Mukono University
- 22. John Weeraga- Features Editor, Bukedde Newspaper
- 23. William Ekukwai-Freelance Radio Journalist
- 24. Joshua Kyalimpa- Radio Simba FM
- 25. Charles Ariko- Reporter, New Vision

Research Project Budget.

Budget Item.	Rate.	Quantity.	Amount.
Accommodation	@ \$25 for 2 days	25 persons	\$1250
Resource Persons	@ \$50 for 3 days	5 persons	\$ 750
Feeding	@ \$10 for 3 days	25 persons	\$ 750
Transport refund	@ \$30 for trainees	20 persons	\$ 600
Venue/Hire Equip.	@ \$100 per day	3 days	\$ 300
Stationery/Secretarial	@\$ 200 for all days	All days	\$ 200
Transport/Telephone	@ \$ 200	Whole duration	\$ 200
Administering	@ \$200	All places	\$ 200
Questionnaire			
Data Analysis/Report	@ \$ 500	Whole duration	\$ 500
Writing			
5 % Institutional	@ 250		\$ 250
costs to MEDECOS			
TOTAL. (Five			
thousand dollars.)			\$ 5000